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Supplemental Material

Recommendations for Evaluating Temporal Trends of Persistent Organic Pollutants in Breast Milk

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Table S1: Input data for and model output of the CSTD half-life tool for BDE-47 (tool available on <http://www.sust-chem.ethz.ch/downloads>).

Input data	Year	Concentration (ng/g lipid)	Reference
	2004	1.7 ^a	Glynn et al. (2012)/Fangström et al. (2008)
	2006	1.3	Glynn et al. (2012)
	2008	1.2	Lignell et al. (2012)
	2010	0.64	Lignell et al. (2012)
	2012	0.82	Lignell et al. (2014)
Input data	Year	Intake (ng/d)	Reference
	1999	26.5	Darnerud et al. (2006)
	2005	20.6	Törnkvist et al. (2011)
	2010	8.46	National Food Agency (2012)
Model output	CSTD-based half-life		
	$t_{1/2}^{\text{CSTD}}$	6.4 years	
	Intrinsic elimination half-life		
	$t_{1/2}^{\text{elim}}$	2.2 years	

^aweighted average

Table S2: Input data for and model output of CSTD half-life tool for DDT (tool available on <http://www.sust-chem.ethz.ch/downloads>).

Input data	Year	Concentration (ng/g lipid)	Reference
	1980	185	Norén and Meironyté (2000)
	1985	61	Norén and Meironyté (2000)
	1989	47	Norén and Meironyté (2000)
	1990	42	Norén and Meironyté (2000)
	1991	36	Norén and Meironyté (2000)
	1992	22	Norén and Meironyté (2000)
	1994	12	Norén and Meironyté (2000)
	1996	12.5 ^a	Glynn et al. (2012)/Norén and Meironyté (2000)
	1997	14 ^a	Glynn et al. (2012)/(Norén and Meironyté (2000))
	1998	7.9	Glynn et al. (2012)
	1999	5.8	Glynn et al. (2012)
	2000	6.3	Glynn et al. (2012)
	2001	5.8	Glynn et al. (2012)
	2002	4.7	Glynn et al. (2012)
	2003	3.6	Glynn et al. (2012)
	2004	5.2	Glynn et al. (2012)
	2006	4	Glynn et al. (2012)
	2008	2.3	Glynn et al. (2012)
	2012	2.2	Lignell et al. (2014)
Input data	Year	Intake (ng/d)	Reference
	1999	76.5	Darnerud et al. (2006) (25% of <i>p,p'</i> -DDE intake) ^b
	2005	52.5	Törnkvist et al. (2011) (25% of <i>p,p'</i> -DDE intake) ^b
Model output	CSTD-based half-life		
	$t_{1/2}^{\text{CSTD}}$	4.7 years	
	Intrinsic elimination half-life		
	$t_{1/2}^{\text{elim}}$	1.9 years	

^aweighted average

^bsame approach as in Ritter et al. (2009)

Table S3: Input data for and model output of CSTD half-life tool for PCB-153 (tool available on <http://www.sust-chem.ethz.ch/downloads>).

Input data	Year	Concentration (ng/g lipid)	Reference
	2000	56	Glynn et al. (2012)
	2001	53	Glynn et al. (2012)
	2002	48	Glynn et al. (2012)
	2003	37	Glynn et al. (2012)
	2004	38	Glynn et al. (2012)
	2006	36	Glynn et al. (2012)
	2008	33.5 ^a	Glynn et al. (2012)/Lignell et al. (2012)
	2010	27	Lignell et al. (2012)
	2012	22	Lignell et al. (2014)
Input data	Year	Intake (ng/d)	Reference
	1999	139	Darnerud et al. 2006
	2005	85.3	Törnkvist et al. 2011
	2010	89.3	National Food Agency (2012)
Model output	CSTD-based half-life		
	$t_{1/2}^{\text{CSTD}}$	9.8 years	
	Intrinsic elimination half-life		
	$t_{1/2}^{\text{elim}}$	7.0 years	

^aweighted average

Table S4: Input data for and model output of CSTD half-life tool for HCB (tool available on <http://www.sust-chem.ethz.ch/downloads>).

Input data	Year	Concentration (ng/g lipid)	Reference
	2001	15	Glynn et al. (2012)
	2002	9.6	Glynn et al. (2012)
	2003	8.4	Glynn et al. (2012)
	2004	10	Glynn et al. (2012)
	2006	7.9	Glynn et al. (2012)
	2008	8.4	Glynn et al. (2012)
	2012	7.2	Lignell et al. (2014)
Input data	Year	Intake (ng/d)	Reference
	1975	720	Vaz et al. (1995) ^a
	1980	480	Vaz et al. (1995)
	1985	180	Vaz et al. (1995)
	1990	300	Vaz et al. (1995)
	1994	330	Darnerud et al. (2006)
	1999	114	Darnerud et al. (2006)
	2005	83.4	Törnkvist et al. (2011)
	2010	97.7	National Food Agency (2012)
Model output	CSTD-based half-life		
	$t_{1/2}^{\text{CSTD}}$	14.9 years	
	Intrinsic elimination half-life		
	$t_{1/2}^{\text{elim}}$	2.4 years	

^aVaz et al. (1995) expressed intakes as ng/kg/d assuming a body weight of 60 kg.

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